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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,910	04/25/2001	Tetsuichiro Yamamoto	045054/0142	5238
22428	7590	11/16/2004	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			SAFAIPOUR, HOUSHANG	
			ART UNIT	PAPER NUMBER
			2622	

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/840,910	Applicant(s) YAMAMOTO ET AL.	
	Examiner Houshang Safaipoor	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 11-16 is/are rejected.
- 7) ☒ Claim(s) 5-10 and 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Objection

Claim 17 is dependent on a non-existing claim 21 and therefore, is not evaluated.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawamoto et al. (U.S. Patent No. 5,920,063).

Regarding claim 1, Kawamoto et al. discloses an image reading method for reading lines on a surface of an object to be read in a sub-scanning direction and for outputting image signals obtained by reading said lines to be read, comprising:

a step of setting a number M of lines (said M is a natural number being not less than two) that have to be simultaneously read, an interval N (said N is a natural number being not less than two) among said lines that have to be simultaneously read and which is represented by lines to be read and a number L of lines (said L is a natural number) by which each of said lines to be read moves, every time simultaneous reading is completed, from said lines whose reading has been completed, to a value that can avoid omission of reading when a sequential single reading is performed from a first line to be read on said surface of said object to a last line to be read on said surface of said object and to a value at which said lines to be read on said surface of said object can be all read, a step of reading said lines to be read on said surface of said object to be

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read by moving said lines by a number of said lines to be read in a sub-scanning direction when said simultaneous reading has been completed and by repeating said simultaneous reading on subsequent lines to be read (col. 1, line 53 through col. 2 line 15 and col. 3, lines 24-60); and a step of outputting image data obtained by reading said lines to be read (col. 3, line 61 through col. 4 line 19).

Regarding claim 2, Kawamoto et al. discloses the image reading method according to claim 1, wherein values of said M, said N and said L are set to a value at which there is no omission of reading lines to be read occurring in said single time reading operation (fig. 2, col. 4, lines 55-64).

Regarding claim 3, Kawamoto et al. discloses the image reading method according to claim 2, wherein said first line to be read on said surface of said object is a line existing backward, from a first line to be normally read on said surface of said object, by predetermined numbers of lines to be read which is determined based on values of said M, said N, and said L, in said sub-scanning direction, while said last line to be read is a line existing forward, from a last line to be normally read on said surface of said object, by predetermined numbers of lines to be read which is determined based on values of said M, said N, and said L, in said sub-scanning direction and wherein image signals of said lines to be read are image signals of said first line to be normally read to said last line to be normally read (col. 1, line 53 through col. 2 line 15 and col. 3, lines 24-60).

Regarding claim 14, arguments analogous to those presented for claims 1 are applicable to claim 14.

Regarding claims 15 and 16, arguments analogous to those presented for claims 11 and 3 are applicable to claims 15 and 16 respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamoto et al. (U.S. Patent No. 5,920,063).

Regarding claim 4, Kawamoto et al. discloses an image reading apparatus for reading lines to be read on a surface of an original document in a sub-scanning direction and outputting image signals obtained by reading said lines to be read, comprising: a reading unit having light sensing devices that are able to simultaneously read M (said M is a natural number being not less than two) pieces of lines to be read which are said lines to be read existing on said surface of said original document and which are different lines in said sub-scanning direction, each existing apart by N (said N is a natural number being not less than two) pieces of lines in said sub-scanning direction (please refer to claim 1);

Kawamoto et al. does not explicitly disclose a moving unit to move said original document and said reading unit, every time said lines are simultaneously read, by L (said L is a natural numbers) pieces of said lines to be read, in said sub-scanning direction, however, the use of a moving unit to move an original document in scanning apparatus is well known in the art

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(Official Notice). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to add this feature to Kawamoto image sensing device;

Kawamoto et al. an image signal outputting unit to output image signals of said lines to be read which have been read by said reading unit in order of reading in said sub-scanning direction; and wherein values of said M, said N, and said L are set to a value at which lines on said surface of said original document are able to be read without omission of reading lines when simultaneous and sequential reading operations are performed from a first line to be read to a last line to be read on said surface of said original document (please refer to claim 1).

Regarding claim 11, Kawamoto et al. discloses the image reading apparatus according to claim 4, wherein said image outputting unit includes: an analog to digital converting circuit to analog to digital convert image signals of M pieces of lines to be read which have been output from said reading unit; a storing device to store pixel data obtained by conversion by said analog to digital converting circuit; and a reading control circuit to read said pixel data stored in said storing device in order of reading in said sub-scanning direction (col. 2, line 53 through col. 3, line 11).

Regarding claim 12, arguments analogous to those presented for claims 1 and 11 are applicable to claim 12.

Regarding claim 13, Kawamoto et al. discloses the image reading apparatus according to claim 12, wherein said reading device is constructed as a color reading device, and wherein an image processing circuit for gray-level correction is provided between said storing device and said analog to digital converting circuit making up said image signal outputting (col. 6, line 59 through col. 7, line 8).

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Allowable Subject Matter

Claims 5-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Houshang Safaipoor whose telephone number is (703)306-4037. The examiner can normally be reached on Mon.-Thurs. from 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L Coles, Sr. can be reached on (703)305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Houshang Safaipoor
Patent Examiner
Art Unit 2622
November 13, 2004


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